Hospital Participation in the Emergency Cardiac and Stroke System

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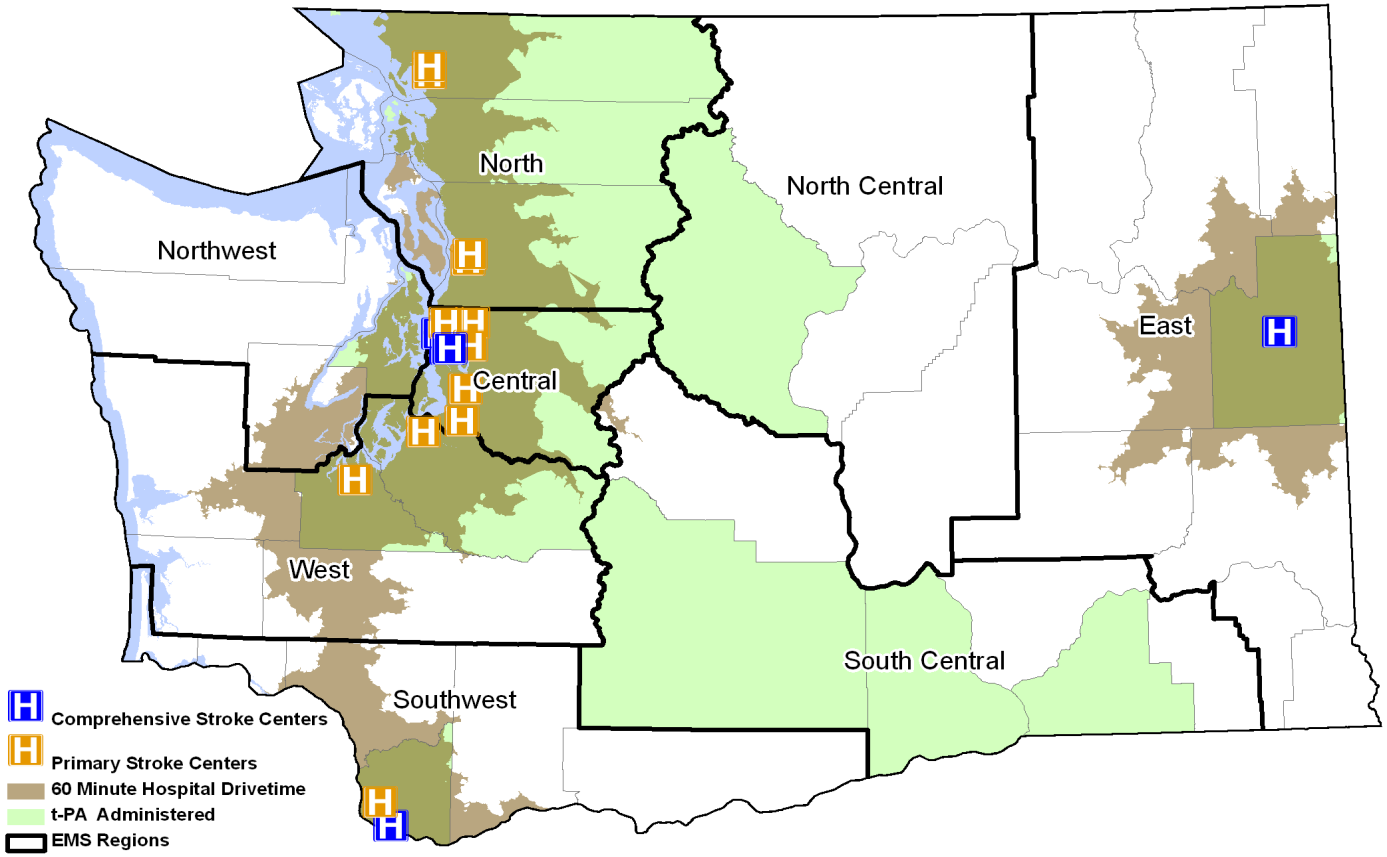
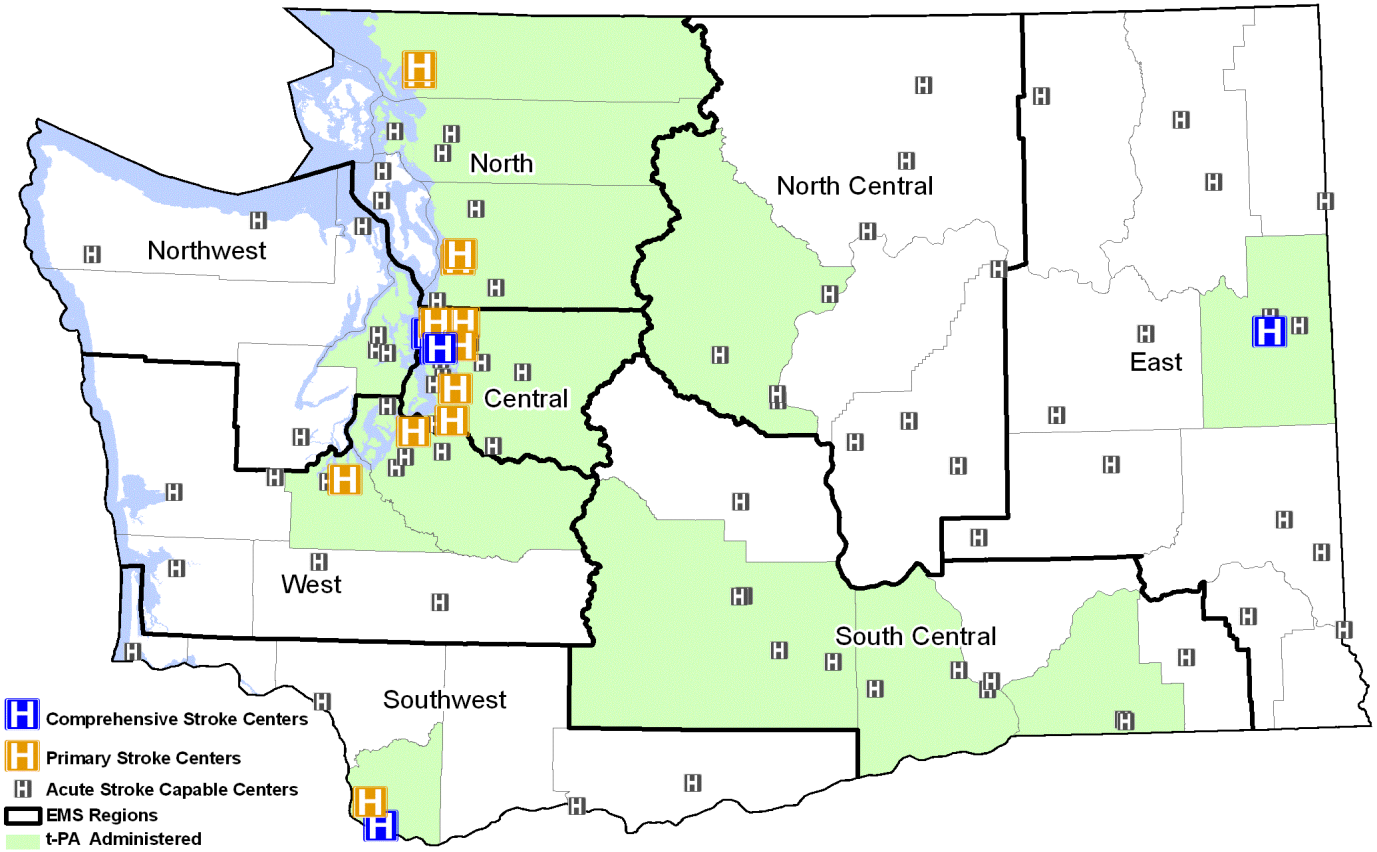
Why Participate?

- People in your community can be treated for stroke quickly and close to home
- EMS will bring stroke and suspected stroke patients to your hospital
- Support the statewide effort to stroke tx available within 1 hour for all citizens

Stroke Centers with 60 minute Drive Times



Stroke Treatment Available to All Washingtonians



How Does a Hospital Participate?

- Determine which stroke center level your hospital meets
- Fill out application sent by DOH in September
- Work with EMS and EMS region and transfer/receiving hospitals re triage, communication, and transfer protocols

Participation Process

- CEO signs certifying level requirements are met
- Send to DOH with requested documentation
- DOH notifies hospital of approval
- DOH publishes list of participating hospitals in February or March

System Goes Live June 2011

- In June 2011 (or before) hospital receives stroke patients from EMS
- Data collection officially begins (voluntary but highly desired!)
- Participate in EMS/T Regional QI Forums on stroke cases

Level 3 Acute Stroke Capable

These hospitals have the infrastructure and capability to care for acute stroke, including administration of intravenous t-PA. Most stroke patients would be transferred to a Level 1 or 2 post-treatment.

Level 3 Criteria

Personnel includes:

- ED personnel trained in diagnosing and treating acute stroke and who participate in educational activities related to stroke at least twice a year
- Staff (in-person or remotely) to read CT/MRI w/in 45 minutes of order 24/7
- Neurologist or physician experienced in cerebrovascular care available 24/7: on-site or by telemedicine (e.g., phone, video-conference) within 20 minutes of notification of patient's arrival

Level 3 Criteria

Diagnostic techniques

- CT or MRI performance w/in 25 minutes of order 24/7
- ECG and Chest X-ray
- Swallowing assessment screening

Surgical and interventional therapies

- IV thrombolytic therapy

Level 3 Criteria

- **Infrastructure**
- Written stroke protocols
- Organizational/administrative support
- Integration with EMS, with a written plan and letter of cooperation regarding triage and communication consistent with regional patient care procedures
- Cooperative stroke-specific educational activities at least twice a year
- Transfer protocols and agreements
- Laboratory or point of care testing 24/7
- Data collection and reporting

Level 3 Criteria

- Patient education
- T-PA administration within current guidelines

Level 2 Primary Stroke Centers

A primary stroke center (PSC) has the necessary staffing, infrastructure, and programs to stabilize and treat most acute stroke patients. The criteria proposed for a Level 2 PSC is consistent with the Joint Commission criteria for PSC certification in 2007.

Level 2 Criteria

Personnel includes

- Acute stroke team available 24/7 w/in 15 minutes
- Emergency department personnel trained in diagnosing and treating acute stroke
- Staff (in-person or remotely) to read CT/MRI w/in 45 minutes of order 24/7
- Qualified Center Medical Director
- Stroke Program Coordinator
- Neurologist or physician experienced in cerebrovascular care 24/7
- Diagnostic radiology
- Rehabilitation therapists (physical, occupational, speech therapy)
- Staff stroke nurses(s)
- Radiologic technologist

Level 2 Criteria

Diagnostic techniques

- CT or MRI performance w/in 25 minutes of order 24/7
- ECG and Chest X-ray
- Carotid artery imaging [R]
- Intracranial and extracranial vascular imaging [R]
- Swallowing assessment screening

Surgical and interventional therapies

- IV thrombolytic therapy
- IA thrombolytic (not required)

Level 2 Criteria

Infrastructure

- Written stroke protocols, which include triage, stabilization of vital functions, initial diagnostic tests, and use of medications.
- Stroke unit (may be part of an ICU)
- Organizational/administrative support
- Integration with EMS
- Cooperative stroke-specific educational activities at least twice a year
- Transfer protocols and agreements in place
- Laboratory or point of care testing 24/7
- ICU [R]
- **Stroke registry**
- Data collection and reporting

Level 2 Criteria

Educational/research programs

- ≥8 hours education/year related to cerebrovascular disease for all stroke team staff
- Community stroke education activities
- Patient education

Performance/quality measures

- Stroke unit documentation about staffing, operation, admission/discharge, care protocols, census and outcome dat
- Performance improvement on at least 2 relevant patient-care benchmarks each year
- Timeline for t-PA administration within current guidelines
- 10 harmonized performance measures

Level 1 CSC

- A facility or system with the personnel, infrastructure, and expertise to diagnose and treat stroke patients who require intensive medical and surgical care, specialized tests, or interventional therapies.
- Additional functions would be to act as a resource center for other facilities in their region, such as Level 2 and Level 3 stroke centers.
- The criteria is based on the 2005 Brain Attack Coalition (BAC) paper on comprehensive stroke centers.

How Do We Tell if We've Made a Difference?

Hospital/EMS Measures

- Percent of stroke patients who arrived by EMS
- Percent of stroke patients for which prearrival notification from EMS was received
- Percent of strokes treated with t-PA
- *Placeholder: Percent of eligible ischemic stroke patients who received t-PA*
- Percent t-PA administered within 60 minutes
- Time from onset to 911 call
- Time from first medical contact (EMS, or ER if self-transport) to treatment
- Time from onset to treatment
- 10 (8) Consensus Measures (or CMS Core Measures)
- Function at 3 months (wish list or study)

Discussion/Questions

Thank you

Questions?
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